

NFT Vision
Hack

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GraphemeNFT



Generative Ascii Art Creator
<https://graphemenft.github.io/>

POWERED BY



SUPPORTED BY



Introduction

We are global hackers with decades of software development experience.



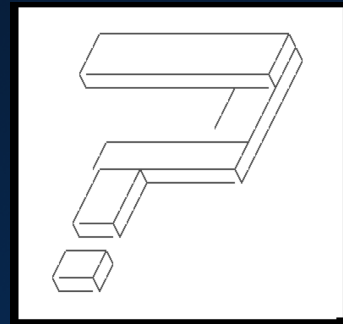
DCsan

Game designer / AI Dev
NFT Artist (ArtBlocks etc)



Tomo

Crypto coding since '16
Former ASCII artist

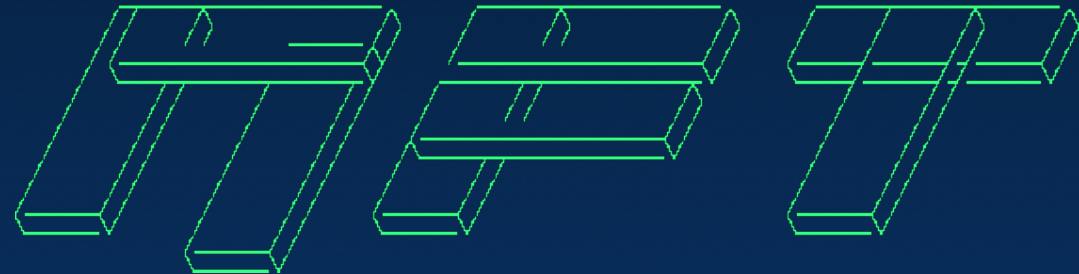


Sri

Software Developer

Tracks of choice:

1. Build on Rarible Protocol
2. Scalable NFT Art Project (Indorse)
3. Gaming & NFTs (IPFS)

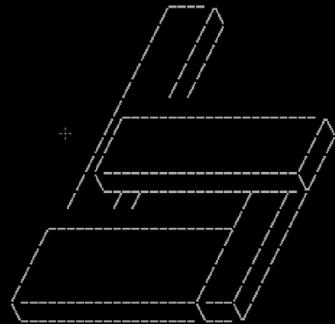


Project

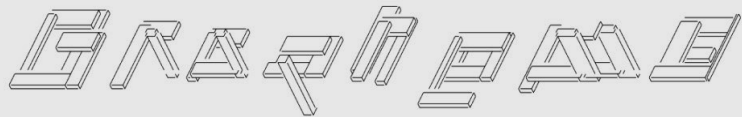
We built a novel generative ASCII art project with 2 levels.

- Token Level 1: “Letters” are unpredictable until created and impossible to preview
 - Gen algo is in `grapheme.js` which anyone can run independently with 32 bits
- Each “roll” comes with 6 Letters like a pack of game cards
- Token Level 2: “Words” are user-designed compound tokens that use & depend on their Letters
- Both Letters & Words can be generated in perpetuity, not all generated up front like Punks
- Creative coding came up with an ASCII art-style generator whose output looks alphanumeric
 - called **Graphemes** in linguistics terminology
- Letter/Word tokens can be named then traded for Letters you need
- Rolling a rare-looking Letter might get lots of offers to buy!
 - Letter/Word NFTs indexed on Rarible and Rarible Royalties are applied
- All metadata and renderings stored on IPFS, otherwise data on the blockchain - no servers
 - using Infura’s IPFS api, ipfs-http-client, and ipfs.io gateway

0,6,5,4,7,3,2,2,9,1,2,0,0,6,9,5,1,5,4,8,2,6,4,8,9,9



Work in progress





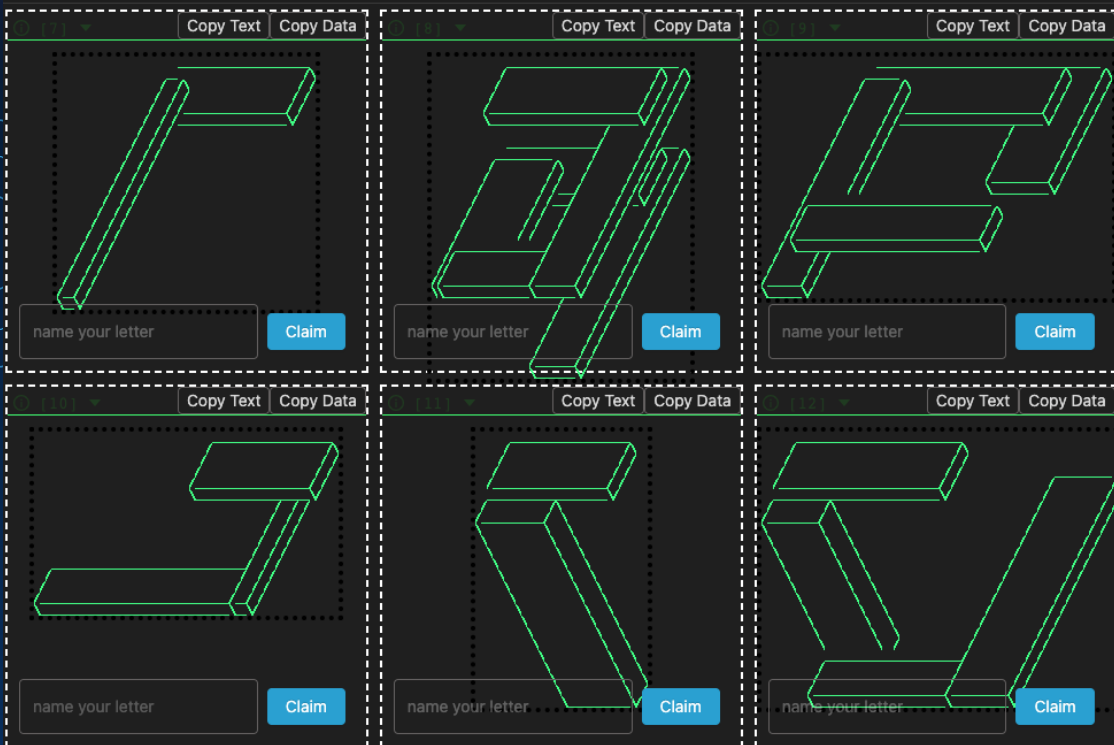
cF2ab8d5d15A4B58fb5c263fFA88Ba2Cb930038a



Scan

rollToMint

it can take a few minutes for the minting to complete!



First you roll some individual letters.

You get 6 unique NFTs per each “roll”.

Each letter has a random 32-bit hash - it's unique DNA.

We use a special algorithm to visualize these as stylized ASCII “graphemes”, copyable as plaintext.

WordTool

DUNEWALKER

Cast Word

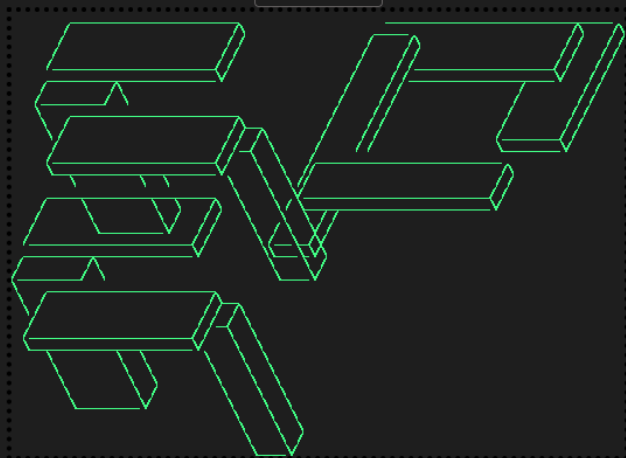
Add Letters: 9 BigP 16 number7 17 backL 25 Multi

X (del) 9 51 1 LEFT UP DOWN DOWN 10 RIGHT RIGHT 10

X (del) 25 11 1 LEFT UP DOWN DOWN 10 RIGHT RIGHT 10

X (del) 25 7 16 LEFT UP DOWN DOWN 10 RIGHT RIGHT 10

View as text



Combine your claimed “Letters” in the ASCII studio, composing a Word “piece” from multiple graphemes.

Cast Word into a token when you’re happy with the results.

Technology & Tech Stack

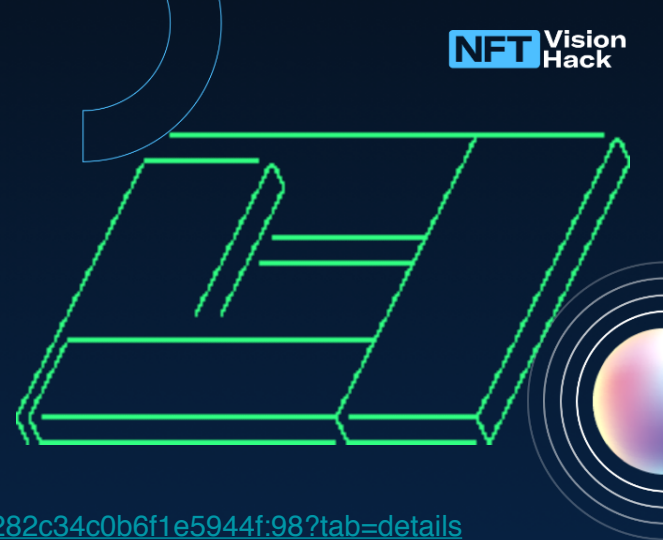
- Create React App based off rarible-starter-app compiled to static files
- Open source Web UI hosted on GitHub Pages or run locally by anyone
- Based off ERC-721 contracts from rarible-starter-app
- NFTs indexed on Rarible servers

Ex: <https://ropsten.rarible.com/token/0x68e80e094959c5c4f998a5282c34c0b6f1e5944f:98?tab=details>

- Rarible Royalties interface in NFT for composing Words from Letters
- HTML canvas used to render images in browser then blobbed into IPFS whose CID is stored in token URI's metadata.json

e.g. `ipfs://QmTXk3BzEX7na2WTcLp5fP25WdDnZdAv6B7323RXbMFr9a`

- hardhat for local chain, compiling contracts, and deploying to Ropsten testnet
- Nudel's POT-NOODLE font from rewtnull/amigafonts



Scalability

This is an art project for artists. A tool for creating text art on the blockchain whose provenance can be verified to a creator's wallet. But it's extremely light on data resources to be affordable to creators - a single Letter is only 4 bytes!

The ASCII art scene, from which this project takes its inspiration, also has a tradition of publishing periodic "artpacks" where artists show what they've made recently and these are featured and archived on sites like 16colo.rs.

The art that gets created can be featured anywhere either text or images can be displayed:

- email signatures
- social media profiles

Letters could also appear anywhere stylized text is needed to stand out such as:

- README files, source code
- booting, running command line programs

FIN. Thanks for watching!